IN THE CLAIMS

Please amend claim 10 and add claims 21-23 as follows. The following is the status of the claims in this application:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)

5. (previously presented) A reduction casting apparatus for performing a casting while an oxide film formed on a surface of the molten metal is reduced by allowing the molten metal and a reducing compound to be contacted with each other, comprising:

a molding die having a cavity for receiving the molten metal, and a feeder head portion and a runner which are arranged in an upstream side of the cavity for pouring the molten metal into the cavity, the runner having a higher heat insulating property and a smaller flow passage diameter than that of the feeder head portion providing a turbulent flow of a molten metal in the cavity.

6. (previously presented) The reduction casting apparatus as set forth in claim 5, wherein the feeder head portion is arranged just upstream of the cavity, and wherein the runner is connected with the feeder head portion.

7. (original) The reduction casting apparatus as set forth in claim 5, wherein a molten metal reservoir for storing the molten metal is arranged at a sprue which is arranged in an upstream side of the runner, and wherein an opening/closing member for opening/closing a communication between the molten metal reservoir and the runner is arranged therebetween.

8. (previously presented) The reduction casting apparatus as set forth in claim 7, wherein the molding die includes a metallic mold portion defining the cavity and the feeder head portion, and a ceramic adaptor defining the runner and the sprue.

9. (original) The reduction casting apparatus as set forth in claim 5, wherein a surface of an inner wall of the runner is subjected to a heat insulating treatment or formed by a heat insulating material selected from the group consisting of: ceramic, an alumina board and other heat insulating materials.

10. (currently amended) A molding die for use in an aluminum reduction casting method, in which a molten metal of aluminum or an alloy thereof is poured into a cavity and casting is performed while an oxide film formed on a surface of the molten metal is reduced by allowing a magnesium-nitrogen compound and the molten metal to be contacted with each other in the cavity, the magnesium-nitrogen compound being generated by allowing a magnesium gas and a nitrogen gas to be reacted with each other,

wherein a first runner has a smaller flow passage diameter and a higher heat insulating property than that of a feeder head portion ~~is~~ arranged in an upstream side of the cavity~~, the first runner providing a turbulent flow of the molten metal in the cavity~~.

11. (original) The molding die as set forth in claim 10, wherein a second runner for pouring the molten metal into the cavity is directly connected to the cavity in the upstream side of the cavity.

12. (previously presented) The reduction casting apparatus as set forth in claim 5, further comprising a gate having a smaller diameter than the feeder head portion to provide a stepped feature therebetween, a flow passage of the feeder head portion being provided in axial alignment with the gate.

13. (previously presented) The reduction casting apparatus as set forth in claim 12, wherein a shoulder is formed between the gate and the feeder head portion.

14. (previously presented) The molding die as set forth in claim 10, further comprising a gate having a smaller diameter than the feeder head portion to provide a stepped feature therebetween, a flow passage of the feeder head portion being provided in axial alignment with the gate.

15. (previously presented) The molding die as set forth in claim 14, wherein a shoulder is formed between the first diameter and the second diameter.

16. (previously presented) A reduction casting apparatus, comprising:

a sprue;

a runner positioned adjacent the sprue;

a removeable stopper positionable between the runner and the sprue to adjust a flow rate of molten metal;

a feeder head portion having a diameter larger than a flow passage diameter of the runner;

a gate in fluid communication with the feeder head portion and having a diameter smaller than the diameter of the feeder head portion; and

a molding die adjacent to the gate and having a cavity for receiving the molten metal,

wherein the gate, the feeder head portion and the runner are arranged so that the molten metal flows in a straight line from the runner to the cavity.

17. (previously presented) The reduction casting apparatus of claim 16, wherein the runner has a higher heat insulating property than the feeder head portion.

18. (previously presented) The reduction casting apparatus of claim 16, wherein the runner is arranged such that it extends vertically downward to the feeder head portion and the molten metal is perpendicularly dropped from the sprue to the cavity.

19. (previously presented) The reduction casting apparatus of claim 16, wherein the flow passage diameter is set smaller than the feeder head portion so that the flow rate of the molten metal to be poured into the cavity is brought faster than when the molten metal is poured from the sprue to the cavity directly via the feeder head portion.

20. (previously presented) The reduction casting apparatus of claim 16, wherein a flow passage of the feeder head portion is provided in axial alignment with the gate.

21. (New) The molding die of claim 10, wherein the first runner provides a turbulent flow of the molten metal in the cavity.

22. (New) A reduction casting apparatus, comprising:

a sprue;

a runner positioned adjacent the sprue;

a removeable stopper positionable between the runner and the sprue;

a feeder head portion;

a gate in fluid communication with the feeder head portion; and

a molding die adjacent to the gate and having a cavity for receiving the molten metal,

wherein at least the runner, the gate and the feeder head portion are in vertical alignment so that the molten metal flows from the runner to the cavity.

23. (New) The reduction casting apparatus of claim 22, wherein:

the gate is in fluid communication with the feeder head portion and has a diameter smaller than the diameter of the feeder head portion; and

the feeder head portion has a diameter larger than a flow passage diameter of the runner.